1600

RAW SEQUENCE LISTING DATE: 12/06/2003
PATENT APPLICATION: **US/09/895,263B** TIME: 10:47:55

Input Set : **A:\PTO.YF.txt**
Output Set: **N:\CRF4\12062003\I895263B.raw**


```
      3 <110> APPLICANT: He, et al.
      5 <120> TITLE OF INVENTION: Antibodies to Interleukin-1 Beta Converting Enzyme Like
Apoptosis
      6       Protease 3
      7       and 4
      9 <130> FILE REFERENCE: PF140C2
     11 <140> CURRENT APPLICATION NUMBER: 09/895,263B
     12 <141> CURRENT FILING DATE: 2001-07-02
     14 <150> PRIOR APPLICATION NUMBER: 08/334,251
     15 <151> PRIOR FILING DATE: 1994-11-01
     17 <160> NUMBER OF SEQ ID NOS: 14
     19 <170> SOFTWARE: PatentIn version 3.2
     21 <210> SEQ ID NO: 1
     22 <211> LENGTH: 1369
     23 <212> TYPE: DNA
     24 <213> ORGANISM: Homo sapiens
     26 <400> SEQUENCE: 1
     27 gcacgagaaa ctttgctgtg cgcgttctcc cgcgcgcggg ctcaactttg tagagcgagg     60
     29 ggccaacttg gcagagcgcg cggccagctt tgcagagagc gccctccagg gactatgcgt    120
     31 gcggggacac gggtcgcttt gggctcttcc acccctgcgg agcgcactac cccgagccag    180
     33 gggcggtgca agccccgccc ggccctaccc agggcggctc ctccctccgc agcgccgaga    240
     35 cttttagttt cgctttcgct aaaggggccc cagacccttg ctgcggagcg acggagagag    300
     37 actgtgccag tcccagccgc cctaccgccg tgggaacgat ggcagatgat cagggctgta    360
     39 ttgaagagca gggggttgag gattcagcaa atgaagattc agtggatgct aagccagacc    420
     41 ggtcctcgtt tgtaccgtcc ctcttcagta agaagaagaa aaatgtcacc atgcgatcca    480
     43 tcaagaccac ccgggaccga gtgcctacat atcagtacaa catgaatttt gaaaagctgg    540
     45 gcaaatgcat cataataaac aacaagaact ttgataaagt gacaggtatg ggcgttcgaa    600
     47 acggaacaga caaagatgcc gaggcgctct tcaagtgctt ccgaagcctg ggttttgacg    660
     49 tgattgtcta taatgactgc tcttgtgcca agatgcaaga tctgcttaaa aaagcttctg    720
     51 aagaggacca tacaaatgcc gcctgcttcg cctgcatcct cttaagccat ggagaagaaa    780
     53 atgtaattta tgggaaagat ggtgtcacac caataaagga tttgacagcc cactttaggg    840
     55 gggatagatg caaaaccctt ttagagaaac ccaaactctt cttcattcag gcttgccgag    900
     57 ggaccgagct tgatgatgcc atccaggccg actcggggcc catcaatgac acagatgcta    960
     59 atcctcgata caagatccca gtggaagctg acttcctctt cgcctattcc acggttccag   1020
     61 gctattactc gtggaggagc ccaggaagag gctcctggtt tgtgcaagcc ctctgctcca   1080
     63 tcctggagga gcacggaaaa gacctggaaa tcatgcagat cctcaccagg gtgaatgaca   1140
     65 gagttgccag gcactttgag tctcagtctg atgacccaca cttccatgag aagaagcaga   1200
     67 tcccctgtgt ggtctccatg ctcaccaagg aactctactt cagtcaatag ccatatcagg   1260
     69 ggtacattct agctgagaag caatgggtca ctcattaatg aatcacattt ttttatgctc   1320
     71 ttgaaatatt cagaaattct ccaggatttt aatttcagga aaatgtatt               1369
     74 <210> SEQ ID NO: 2
     75 <211> LENGTH: 303
     76 <212> TYPE: PRT
     77 <213> ORGANISM: Homo sapiens
```

RAW SEQUENCE LISTING DATE: 12/06/2003
PATENT APPLICATION: **US/09/895,263B** TIME: 10:47:55

Input Set : **A:\PTO.YF.txt**
Output Set: **N:\CRF4\12062003\I895263B.raw**

79 <400> SEQUENCE: 2
81 Met Ala Asp Asp Gln Gly Cys Ile Glu Glu Gln Gly Val Glu Asp Ser
82 1 5 10 15
85 Ala Asn Glu Asp Ser Val Asp Ala Lys Pro Asp Arg Ser Ser Phe Val
86 20 25 30
89 Pro Ser Leu Phe Ser Lys Lys Lys Lys Asn Val Thr Met Arg Ser Ile
90 35 40 45
93 Lys Thr Thr Arg Asp Arg Val Pro Thr Tyr Gln Tyr Asn Met Asn Phe
94 50 55 60
97 Glu Lys Leu Gly Lys Cys Ile Ile Ile Asn Asn Lys Asn Phe Asp Lys
98 65 70 75 80
101 Val Thr Gly Met Gly Val Arg Asn Gly Thr Asp Lys Asp Ala Glu Ala
102 85 90 95
105 Leu Phe Lys Cys Phe Arg Ser Leu Gly Phe Asp Val Ile Val Tyr Asn
106 100 105 110
109 Asp Cys Ser Cys Ala Lys Met Gln Asp Leu Leu Lys Lys Ala Ser Glu
110 115 120 125
113 Glu Asp His Thr Asn Ala Ala Cys Phe Ala Cys Ile Leu Leu Ser His
114 130 135 140
117 Gly Glu Glu Asn Val Ile Tyr Gly Lys Asp Gly Val Thr Pro Ile Lys
118 145 150 155 160
121 Asp Leu Thr Ala His Phe Arg Gly Asp Arg Cys Lys Thr Leu Leu Glu
122 165 170 175
125 Lys Pro Lys Leu Phe Phe Ile Gln Ala Cys Arg Gly Thr Glu Leu Asp
126 180 185 190
129 Asp Ala Ile Gln Ala Asp Ser Gly Pro Ile Asn Asp Thr Asp Ala Asn
130 195 200 205
133 Pro Arg Tyr Lys Ile Pro Val Glu Ala Asp Phe Leu Phe Ala Tyr Ser
134 210 215 220
137 Thr Val Pro Gly Tyr Tyr Ser Trp Arg Ser Pro Gly Arg Gly Ser Trp
138 225 230 235 240
141 Phe Val Gln Ala Leu Cys Ser Ile Leu Glu Glu His Gly Lys Asp Leu
142 245 250 255
145 Glu Ile Met Gln Ile Leu Thr Arg Val Asn Asp Arg Val Ala Arg His
146 260 265 270
149 Phe Glu Ser Gln Ser Asp Asp Pro His Phe His Glu Lys Lys Gln Ile
150 275 280 285
153 Pro Cys Val Val Ser Met Leu Thr Lys Glu Leu Tyr Phe Ser Gln
154 290 295 300
157 <210> SEQ ID NO: 3
158 <211> LENGTH: 1159
159 <212> TYPE: DNA
160 <213> ORGANISM: Homo sapiens
162 <400> SEQUENCE: 3
163 gcacgagcgg atgggtgcta ttgtgaggcg gttgtagaag agtttcgtga gtgctcgcag 60
165 ctcatacctg tggctgtgta tccgtggcca cagctggttg gcgtcgcctt gaaatcccag 120
167 gccgtgagga gttagcgagc cctgctcaca ctcggcgctc tggttttcgg tgggtgtgcc 180
169 ctgcacctgc ctcttcccgc attctcatta ataaaggtat ccatggagaa cactgaaaac 240
171 tcagtggatt caaaatccat taaaaatttg gaaccaaaga tcatacatgg aagcgaatca 300

RAW SEQUENCE LISTING DATE: 12/06/2003
PATENT APPLICATION: **US/09/895,263B** TIME: 10:47:55

Input Set : **A:\PTO.YF.txt**
Output Set: **N:\CRF4\12062003\I895263B.raw**

```
173 atggactctg gaatatccct ggacaacagt tataaaatgg attatcctga gatgggttta    360
175 tgtataataa ttaataataa gaattttcat aaaagcactg gaatgacatc tcggtctggt    420
177 acagatgtcg atgcagcaaa cctcagggaa acattcagaa acttgaaata tgaagtcagg    480
179 aataaaaatg atcttacacg tgaagaaatt gtggaattga tgcgtgatgt ttctaaagaa    540
181 gatcacagca aaaggagcag ttttgtttgt gtgcttctga gccatggtga agaaggaata    600
183 atttttggaa caaatggacc tgttgacctg aaaaaaataa caaacttttt cagaggggat    660
185 cgttgtagaa gtctaactgg aaaacccaaa cttttcatta ttcaggcctg ccgtggtaca    720
187 gaactggact gtggcattga gacagacagt ggtgttgatg atgacatggc gtgtcataaa    780
189 ataccagtgg aggccgactt cttgtatgca tactccacag cacctggtta ttattcttgg    840
191 cgaaattcaa aggatggctc ctggttcatc cagtcgcttt gtgccatgct gaaacagtat    900
193 gccgacaagc ttgaatttat gcacattctt acccgggtta accgaaaggt ggcaacagaa    960
195 tttgagtcct tttcctttga cgctactttt catgcaaaga aacagattcc atgtattgtt   1020
197 tccatgctca caaaagaact ctatttttat cactaaagaa atggttggtt ggtggttttt   1080
199 tttagtttgt atgccaagtg agaagatggt atatttgggt actgtatttc cctctcattg   1140
201 gggacctact ctcatgctg                                               1159
204 <210> SEQ ID NO: 4
205 <211> LENGTH: 277
206 <212> TYPE: PRT
207 <213> ORGANISM: Homo sapiens
209 <400> SEQUENCE: 4
211 Met Glu Asn Thr Glu Asn Ser Val Asp Ser Lys Ser Ile Lys Asn Leu
212 1               5                  10                  15
215 Glu Pro Lys Ile Ile His Gly Ser Glu Ser Met Asp Ser Gly Ile Ser
216             20                  25                  30
219 Leu Asp Asn Ser Tyr Lys Met Asp Tyr Pro Glu Met Gly Leu Cys Ile
220         35                  40                  45
223 Ile Ile Asn Asn Lys Asn Phe His Lys Ser Thr Gly Met Thr Ser Arg
224     50                  55                  60
227 Ser Gly Thr Asp Val Asp Ala Ala Asn Leu Arg Glu Thr Phe Arg Asn
228 65                  70                  75                  80
231 Leu Lys Tyr Glu Val Arg Asn Lys Asn Asp Leu Thr Arg Glu Glu Ile
232                 85                  90                  95
235 Val Glu Leu Met Arg Asp Val Ser Lys Glu Asp His Ser Lys Arg Ser
236             100                 105                 110
239 Ser Phe Val Cys Val Leu Leu Ser His Gly Glu Glu Gly Ile Ile Phe
240         115                 120                 125
243 Gly Thr Asn Gly Pro Val Asp Leu Lys Lys Ile Thr Asn Phe Phe Arg
244     130                 135                 140
247 Gly Asp Arg Cys Arg Ser Leu Thr Gly Lys Pro Lys Leu Phe Ile Ile
248 145                 150                 155                 160
251 Gln Ala Cys Arg Gly Thr Glu Leu Asp Cys Gly Ile Glu Thr Asp Ser
252                 165                 170                 175
255 Gly Val Asp Asp Asp Met Ala Cys His Lys Ile Pro Val Glu Ala Asp
256             180                 185                 190
259 Phe Leu Tyr Ala Tyr Ser Thr Ala Pro Gly Tyr Tyr Ser Trp Arg Asn
260         195                 200                 205
263 Ser Lys Asp Gly Ser Trp Phe Ile Gln Ser Leu Cys Ala Met Leu Lys
264     210                 215                 220
267 Gln Tyr Ala Asp Lys Leu Glu Phe Met His Ile Leu Thr Arg Val Asn
```

RAW SEQUENCE LISTING DATE: 12/06/2003
PATENT APPLICATION: **US/09/895,263B** TIME: 10:47:55

Input Set : **A:\PTO.YF.txt**
Output Set: **N:\CRF4\12062003\I895263B.raw**

```
268 225                 230                 235                 240
271 Arg Lys Val Ala Thr Glu Phe Glu Ser Phe Ser Phe Asp Ala Thr Phe
272                 245                 250                 255
275 His Ala Lys Lys Gln Ile Pro Cys Ile Val Ser Met Leu Thr Lys Glu
276             260                 265                 270
279 Leu Tyr Phe Tyr His
280         275
283 <210> SEQ ID NO: 5
284 <211> LENGTH: 31
285 <212> TYPE: DNA
286 <213> ORGANISM: Artificial sequence
288 <220> FEATURE:
289 <223> OTHER INFORMATION: Contains a Bam HI restriction enzyme site (underlined)
followed
290       by 18 nucleotides of ICE-LAP-3 coding sequence starting from the
291       presumed terminal amino acid of the processed protein codon
293 <400> SEQUENCE: 5
294 gatcggatcc atgcgtgcgg ggacacgggt c                                    31
297 <210> SEQ ID NO: 6
298 <211> LENGTH: 31
299 <212> TYPE: DNA
300 <213> ORGANISM: Artificial sequence
302 <220> FEATURE:
303 <223> OTHER INFORMATION: Contains complementary sequences to an Xba I site followed
by 21
304       nucleotides of ICE-LAP-3
306 <400> SEQUENCE: 6
307 gtactctaga tcattcaccc tggtggagga t                                    31
310 <210> SEQ ID NO: 7
311 <211> LENGTH: 31
312 <212> TYPE: DNA
313 <213> ORGANISM: Artificial sequence
315 <220> FEATURE:
316 <223> OTHER INFORMATION: Contains a Bam HI restriction enzyme site followed by 18
317       nucleotides of ICE-LAP-4 coding sequence starting from the
318       presumed terminal amino acid of the processed protein codon
320 <400> SEQUENCE: 7
321 gatcggatcc atggagaaca ctgaaaactc a                                    31
324 <210> SEQ ID NO: 8
325 <211> LENGTH: 31
326 <212> TYPE: DNA
327 <213> ORGANISM: Artificial sequence
329 <220> FEATURE:
330 <223> OTHER INFORMATION: Contains complementary sequences to an Xba I site followed
by 21
331       nucleotides of ICE-LAP-4
333 <400> SEQUENCE: 8
334 gtactctaga ttagtgataa aaatagagtt c                                    31
337 <210> SEQ ID NO: 9
338 <211> LENGTH: 22
339 <212> TYPE: DNA
340 <213> ORGANISM: Artificial sequence
```

RAW SEQUENCE LISTING DATE: 12/06/2003
PATENT APPLICATION: **US/09/895,263B** TIME: 10:47:55

Input Set : **A:\PTO.YF.txt**
Output Set: **N:\CRF4\12062003\I895263B.raw**

```
342 <220> FEATURE:
343 <223> OTHER INFORMATION: Contains the ICE-LAP-3 translational initiation site ATG
followed
344       by 5 nucleotides of ICE-LAP-3 coding sequence starting from the
345       initiation codon
347 <400> SEQUENCE: 9
348 gactatgcgt gcggggacac gg                                              22
351 <210> SEQ ID NO: 10
352 <211> LENGTH: 53
353 <212> TYPE: DNA
354 <213> ORGANISM: Artificial sequence
356 <220> FEATURE:
357 <223> OTHER INFORMATION: Contains translation stop codon, HA tag and the last 21
358       nucleotides of the ICE-LAP-3 coding sequence, not including the
359       stop codon
361 <400> SEQUENCE: 10
362 aatcaagcgt agtctgggac gtcgtatggg tattcaccct ggtggaggat ttg              53
365 <210> SEQ ID NO: 11
366 <211> LENGTH: 21
367 <212> TYPE: DNA
368 <213> ORGANISM: Artificial sequence
370 <220> FEATURE:
371 <223> OTHER INFORMATION: Contains the ICE-LAP-4 translational initiation site, ATG,
372       followed by 15 nucleotides of ICE-LAP-4 coding sequence starting
373       from the initiation codon
375 <400> SEQUENCE: 11
376 accatggaga acactgaaaa c                                               21
379 <210> SEQ ID NO: 12
380 <211> LENGTH: 53
381 <212> TYPE: DNA
382 <213> ORGANISM: Artificial sequence
384 <220> FEATURE:
385 <223> OTHER INFORMATION: Contains translation stop codon, HA tag and the last 21
386       nucleotides of the ICE-LAP-4 coding sequence, not including the
387       stop codon
389 <400> SEQUENCE: 12
390 aatcaagcgt agtctgggac gtcgtatggg tagtgataaa aatagagttc ttt              53
393 <210> SEQ ID NO: 13
394 <211> LENGTH: 503
395 <212> TYPE: PRT
396 <213> ORGANISM: Caenorhabditis elegans
398 <400> SEQUENCE: 13
400 Met Met Arg Gln Asp Arg Arg Ser Leu Leu Glu Arg Asn Ile Met Met
401 1               5                  10                  15
404 Phe Ser Ser His Leu Lys Val Asp Glu Ile Leu Glu Val Leu Ile Ala
405             20                  25                  30
408 Lys Gln Val Leu Asn Ser Asp Asn Gly Asp Met Ile Asn Ser Cys Gly
409         35                  40                  45
412 Thr Val Arg Glu Lys Arg Arg Glu Ile Val Lys Ala Val Gln Arg Arg
413     50                  55                  60
```

VERIFICATION SUMMARY DATE: 12/06/2003
PATENT APPLICATION: **US/09/895,263B** TIME: 10:47:56

Input Set : **A:\PTO.YF.txt**
Output Set: **N:\CRF4\12062003\I895263B.raw**